The identification and analysis of risk for sudden accidental water pollution events based on the water resources monitoring system

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There are always various types of sudden accidental Water Pollution Events under the development of modern Chinese economy society, leading to serious economic losses and casualties. Water resources monitoring system, a real-time monitoring system, was built to monitor water quantity and quality of the important rivers and lakes over the country. Based on the system, we had brought up an idea to calculate the possibility of pollution and the risk of pollution in the watershed, and to deal with the threat of water pollution incidents effectively. It was proposed to build the greatest possible contamination with the most serious pollution values over the past years, and similarity test was carried on over the real-time monitoring of possible contamination value and the calculated value. In our study, taking Taihu River Basin as an example, we detailed the application progress of this method in water pollution incidents, the result shows that the method has a certain timeliness for the early warning of sudden water pollution incidents.